



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,606	07/15/2003	Daimler Chu	FP9657	5352

7590

05/19/2004

Daimler Chu
PO Box 82-144
Taipei,
TAIWAN

EXAMINER

MILLER, BENA B

ART UNIT	PAPER NUMBER
----------	--------------

3712

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/618,606	Applicant(s) CHU, DAIMLER	
	Examiner Bena Miller	Art Unit 3712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claims 1-10 are objected to because of the following informalities: Regarding claim 1, line 5, the phrase "the rim" should read -- a rim --; also, phrase -- plurality of - or the phrase -- at least one -- should be inserted after the first occurrence of the word "a". Further, in line 5 of claim 1, the phrase "which is" should be deleted and read as -- each --. Applicant is requested to thoroughly review the remainder of the claims to make appropriate corrections.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, there is lack of antecedent basis for the limitation "the speed controller".

Regarding claim 2, the examiner is unsure if applicant is claiming the combination of the improved central speed control mechanism and the O-ring or the subcombination of the improved central speed control mechanism only. This in turn, is because while line 1 of the claim 1 appears to indicate that applicant's intention is to claim only the improved central speed control mechanism, claims 2 and 3 recite

Art Unit: 3712

limitations which are dependent on the O-ring (Note: claim 2, line 4, for example only).

In this Office Action, the examiner presumes that the applicant's intention is to prosecute the subcombination of the improved central speed mechanism in order that the claims are given their broadest reasonable interpretation. Accordingly, all additional limitations that are dependent on the O-ring are not considered further structurally limiting with respect to the claimed device.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugimoto.

Regarding the claims, Sugimoto teaches in figures 1-8 an improved central speed control mechanism comprising a housing and a cover (fig.5), a gear set (fig.7) and shaft sections (col. 1, lines 20-59 and col. 2, lines 1-34).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto in view of Osenbaugh et al.

Sugimoto teaches in the figures most of the elements of the claimed invention except for a washer. Osenbaugh et al teaches washers (36a, 37a, 38a and 39a) are provided for urging the gears (36, 37, 38, and 39) apart from one another into frictional engagement. It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply a washer as taught by Osenbaugh et al to the gears of Sugimoto for the purpose of urging the gears apart from one another into frictional engagement.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bongard teaches a locking differential. Chu teaches a differential structure. Okazaki teaches differential gears. Ohashi a running toy with a flywheel. Young teaches a toy vehicle clutch. Moir teaches differential gearing. Crawford teaches a differential.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bena Miller whose telephone number is 703.305.0643. The examiner can normally be reached on Monday-Friday.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Bena Miller
Examiner
Art Unit 3712

bbm
May 15, 2004